CLAIMS:

1. (currently amended) A method of removing sodium from an animal subject comprising administering to an animal subject in need thereof an effective amount of a non-absorbed sodium-binding composition comprising a sodium-binding polymer, <u>said polymer comprising a cation exchange moiety selected from</u>

said polymer having an *in vivo* sodium binding capacity of 4 mmol or more per gram of said polymer in a human and wherein said animal subject is suffering from hypertension, chronic heart failure, end stage renal disease, liver cirrhosis, chronic renal insufficiency, fluid overload, or sodium overload.

- 2. (canceled)
- 3. (withdrawn) The method of claim 1 wherein said sodium-binding composition exhibits decreased permeability to said bound sodium in said lower gastrointestinal tract relative to the permeability exhibited by the sodium-binding composition to said bound sodium in the upper gastrointestinal tract.
- 4. (canceled)
- 5. (withdrawn) The method of claim 1 wherein said sodium-binding composition swells in an isotonic fluid environment.
- 6. (withdrawn) The method of claim 1 wherein said sodium binding by said sodium-binding composition is dependent on a pH of an environment surrounding said polymeric composition.
- 7. (withdrawn) The method of claim 3 wherein said sodium binding by said sodium-binding composition is dependent on a concentration of bile acids and/or fatty acids in an environment surrounding said polymeric composition.

- 8. (withdrawn) The method of claim 3 wherein said sodium binding by said sodium-binding composition is dependent on an activity of enteric enzymes in an environment surrounding said polymeric composition.
- 9. (withdrawn) The method of claim 1 wherein said sodium-binding composition comprises sulfonate or phosphonic polymers.
- 10. (withdrawn) The method of claim 1 wherein said sodium-binding composition does not release Cl⁻ or OH⁻.
- 11. (withdrawn) The method of claim 1 wherein said sodium-binding composition does not release K^+ or Ca^{2+} .
- 12. (canceled)
- 13. (currently amended) The method of claim $\underline{\mathbf{1}}$ [[12]] wherein said <u>sodium-binding</u> <u>polymer acid resin</u> comprises repeat units charged with H^+ or NH_4^+ ions.
- 14. (currently amended) The method of claim 1 or 12 wherein said effective amount of sodium-binding composition administered is not greater than about 15 grams per day.
- 15. (previously presented) The method of claims 1 or 12 wherein the effective amount of said sodium-binding composition removes about 50 mmol of sodium per day.
- 16. (currently amended) The method of claim 1 or 12 wherein said sodium-binding composition comprises at least one of polyvinylsulfonate polymer, polyvinylsulfamate polymer, polyvinylsulfamate/vinylsulfate copolymer, polyvinylphosphoramidic polymer, N-(bis-phosphonic-ethyl) polyvinylamine polymer, poly- α -fluoroacrylic acid polymer, vinylphosphonate/acrylic acid copolymer, vinylphosphonate/ α -fluoroacrylic acid copolymer, polyvinylsulfate polymer, crosslinked polyvinylsulfamate polymer, or poly α -acrylic acid polymer.
- 17 35. (canceled)
- 36. (previously presented) The method of claim 1 wherein extra cellular water is removed from said animal subject.
- 37. (previously presented) The method of claim 1 wherein a beneficial effect is observed on fluid management, blood pressure control, and/or interdialytic weight gain.

- 38. (currently amended) The method of claim 1 or 12 wherein said animal subject is suffering from a disease characterized by a presence of abnormal quantities of sodium and/or water in the body of said animal subject.
- 39. (currently amended) The method of claim 1 or 12 wherein said animal subject is resistant to diuretic treatment and is suffering from hypertension, chronic heart failure, end stage renal disease, liver cirrhosis, chronic renal insufficiency, fluid overload, or a combination thereof.
- 40. (currently amended) The method of claim 1 or 12 wherein sodium is removed from the animal subject over an extended period of time.
- 41. (currently amended) The method of claim 1 or 12 wherein treatment of said animal subject prevents formation of edema after a cardiac event.
- 42. (currently amended) The method of claim 1 or 12 wherein said animal subject is suffering from volume/salt sensitive diastolic heart failure.
- 43. (currently amended) The method of claim 1 or 12 wherein said composition is coadministered with a diuretic, an ACE inhibitor, an α blocker, a β blocker, an angiotensin II receptor blocker, or a combination thereof.
- 44. (currently amended) The method of claim 1 or 12 wherein said composition is coadministered with a laxative.
- 45. (withdrawn) The method of claim 1 wherein said sodium-binding polymer has an *in vitro* sodium binding capacity of equal to or more than 6 mmol per gram of polymer at a pH of about 7.5.
- 46. (withdrawn) The method of claim 1 wherein the *in vivo* sodium binding capacity is 5 mmol or more per gram of said polymer.
- 47. (withdrawn) The method of claim 1 wherein the *in vivo* sodium binding capacity is 6 mmol or more per gram of said polymer.
- 48. (withdrawn) The method of claim 1 wherein the *in vivo* sodium binding capacity is 8 mmol or more per gram of said polymer.
- 49. (withdrawn) The method of claim 1 wherein the sodium binding capacity is calculated by measuring the amount of sodium in the feces after administration of the sodium-binding polymer to a human patient.

- 50. (withdrawn) The method of claim 47 wherein the sodium binding capacity is calculated by measuring the amount of sodium in the feces after administration of the sodium-binding polymer to a human patient.
- 51. (withdrawn) The method of claim 1 wherein said sodium binding polymer comprises a crosslinked polymer.
- 52 59. (canceled)
- 60. (currently amended) The method of claim 1 or 12 wherein said animal subject is suffering from end stage renal disease.
- 61. (currently amended) The method of claim 1 or 12 wherein said animal subject is suffering from chronic renal insufficiency.